TABLE OF CONTENTS

Foreword XI

I INVENTORIES IN THE NATIONAL ECONOMY

ÁBEL, I. and SZALKAI, I.
The Impact of Credit Policy on Macro Inventory Behavior in the Hungarian Economy 3

BERGMANN, B. R.
A Microsimulated Model of Inventories in Interfirm Competition 9

BRIMER, J. T.
A Theory of Business Expectation Formulation 17

CHIKÁN, A.
A Structural Analysis of the Inventory Behavior of Hungarian Industry 27

DIMITROV, P.
Material Stocks and Flows in the National Economy—Some Relations and Dependencies 35

GHALI, M. A.
Seasonal Adjustment Effect on Inventory Behavior 41

GHOSH, S. K.
A Note on the Valuation and Verification of Inventories 47

GÜRMANN, K. and SCHREIBER, K.
The Economy of the Circulation of Funds and Selected Consequences for Stockpiling Management 51

HILLINGER, C.
The Role of Inventory and Equipment Investment in Economic Fluctuations 55

HUNYADI, CS.
Inventory Cycles in Market and in Planned Economies 61

IRVINE, F. O.
Inventory Investment and Business Cycles in the United Kingdom 67

KISPERSKA-MORON, D.
The Influence of Material Inventories on Materials Requirements in Polish Engineering Industry—Let's Try Business Logistics 75

KYLÄHEIKO, K. and PIRTTILÄ, T.
Short-Term Inventory Dynamics in the Finnish Forest Industry 81

LEE, C. J.
A Model of Inventory Accounting Method 87

LOVELL, M. C.
The Inventory Cycle in the United States 93

NERLOVE, M.
The Nature and Significance of the Inventory and Order-Backlog Appraisals in Business-Test Surveys 101

RASULOVA, M. I.
The Main Tendencies of Inventory Movement in the USSR's National Economy and Measures Undertaken for Accelerating Their Turnover 111

REINHARDT, P. G.
A Test for Inflation-Induced Redistributions 115

TRDLICOVÁ, K.
Modelling Macroeconomic Disequilibrium and Possibilities of Optimal Inventory Reallocation 121

WATERS, C. D. J.
Stock-Holding of Manufacturing Industry Within the United Kingdom 127

II INVENTORY MANAGEMENT

ARCELUS, F. J.
On the Discrete Time-Proportional Demand Inventory Problem 135
ARCELUS, F. J. and TRENHOLM, B. A.
On the Determinants of Accounting Inventory Valuation Methods: The Canadian Experience 141
AWATE, P. G.
Analysis of Propagation of Stochastic Errors through an MRP System, and an Industrial Case Study 147
AWATE, P. G.
Inventories as Work Backlogs—Three Case Studies in Diagnostic Analyses Using Regressions, Moving-Averages and CUM-SUM Charts 151
AWATE, P. G.
A Diagnostic Study Concerning Large Fluctuations in Load Plans and Stocks at Sales-Production Interface in a Large Switchgear Company 157
BABU, A. S. and DESHMUKH, S. G.
Some Studies on Integrated Multistage Production-Inventory Systems 163
BONNEY, M. C. and POPPLEWELL, K.
Design of Production Control Systems: Choice of System Structure and Systems Implementation Sequence 169
DAVE, U.
On Reducing Excessive Stock in the Order-Level Lot-Size System for Decaying Inventories 175
EHRENBERG, D.
Decision Support Systems for Management in Central Warehouses of Building Plants 181
FIETEN, R.
Integrating Key Suppliers—Essential Part of a Just-In-Time-Concept 185
FLORES, B. E. and WHYBARK, D. C.
Implementing Multiple Criteria ABC Analysis 191
JACOBS, L.
A 24-Point Action Plan to Introduce Supply as a General Management Function 197
MILTENBURG, G. J. and SILVER, E. A.
A Microcomputer Inventory Control Package for Controlling Families of Items 201
PAPAZOV, K. and TASHEV, A.
A Possibility of Spare Parts Planning Improvement in the Production Enterprises 211
RUSK, P. S. and BARBER, K. D.
Structuring the Bills of Material For a Complex Make-To-Order Product (A Case Study) 215
SILVER, E. A.
Materials Management in Large-Scale Construction Projects: Some Concerns and Research Issues 223
SZ. KIS, L.
MRP and JIT: What Is in It for Hungary? 231
TATSIOPOULOS, I. P.
Some Aspects of the Input/Output Methods for Managing Work-In-Process Inventories 235
TOMEK, G.
Implementation of Computer-Aided Branch Management Systems 241
WALBANK, M.
Information Flows—The Foundation of Manufacturing and Stock Management 245
YILMAZ, C. and BOE, W. J.
Three Major Effects on the Performance of Lot-Sizing Techniques 261
ZIJM, W. H. M. and DE KOK, A. G.
Production Planning and Inventory Management in a Telecommunication Industry 267

III MATHEMATICAL MODELLING OF INVENTORIES

ALPERN, S. and SNOWER, D. J.
A Search Model of Optimal Pricing and Production 279
ANVARI, M.
A Market Based Approach to Incorporating Risk in Stochastic Inventory Models 285
ARCELUS, F. J. and SRINIVASAN, G.
The Sensitivity of Optimal Inventory Policies to Model Assumptions and Parameters 291

ARI, A.
Approximate Solutions to the Disaggregation Problem under Uncertainty 299
AXSÄTER, S.
Initial Order Quantities 307
BOGATAJ, M. and BOGATAJ, L.
The Joint Optimization of the Input Flow and the Size of the Storehouse 311
BOGATAJ, M. and BOGATAJ, L.
Stochastic Control in Management of Water Supply Systems 317
BULINSKAYA, E. V.
Functional Limit Theorems for Some Inventory Models 323
FRIEDMAN, M. F.
The Effect of Stochastic Supply Times on Optimal Policies in Inventory Control 329
GIRLICH, H. J.
A Rolling Schedule Method for Stochastic Demand Inventory Systems 335
GOYAL, S. K.
Determining the Optimum Production-Packaging Policy for Jointly Replenished Items 339
GRUBBSTRÖM, R. W. and HULTMAN, P.
Exergetic and Inventory-Theoretic Aspects of Energy Storage 343
HAEHLING VON LANZENAUER, C.
Magnitude Based Service Level Constraints During a Fiscal Period: The Exponential Distribution 351
HAGEN, O., STRANDE, O. M. and JACOBSEN, J.
Spatila-Box—Software System for Replenishment Quantities of Many Commodities under Simultaneous Restrictions on Space and Capital, and with Quantity Discount Options 361
HARTL, R. F.
On Forward Algorithms for a Generalized Wheat Trading Model 367
KEHAYOV, A.
Some Possibilities for Applying Kotelnikov's Theorem in Stock Control 371
KELLE, P.
Optimal Service Levels in Multi-Item Inventory Systems 375
MABIN, V. J.
A Practical Near-Optimal Order Quantity Method 381
McTAVISH, R. and GOYAL, S. K.
Integrating Marketing and Production Decisions 387
MENIPAZ, E.
An Inventory Model with Product Obsolescence with Implications to the High Technology Industry 391
O'GRADY, P. and BYRNE, M.
Adaptive Lot Sizing (With Case Study) 397
PETROVIĆ, R., ŠENBORN, A. and VUJOŠEVIĆ, M.
A New Adaptive Algorithm for Determination of Stocks in Spare Parts Inventory Systems 405
REMPAŁA, R.
Horizons for a Dynamic Family of Wheat Trading Problems 411
REYNIERS, D. J.
A High-Low Search Model of Inventories with Time Delay 417
RICHTER, K.
Dialog Program for the Two-Criterial Dynamic Lot Size Model 423
SACHAN, R. S.
Policy Decisions for Order-Level Inventory System for Deteriorating Items with Partially Lost Demand 427
SRINIVASAN, S. K. and RAVICHANDRAN, N.
Analysis of (S, s) Inventory System with Decaying Items 433
WHITIN, T. M.
Optimal Stock-Out Timing in a Dynamic Model with Full Backordering 441

LIST OF REFEREES 445